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THOMAS P O'CONNELL 1026A MASSACHUSETTS AVENUE ARLINGTON, MA 02476				DOAN, ROBYN KIEU
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/810,245  
Filing Date: March 25, 2004  
Appellant(s): BOWSHER, M. WILLIAM

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Thomas P. O'connell  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 6/9/08, 10/2/08, 11/13/08, 12/29/08 and appealing from the Office action mailed 1/9/08.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5199452	Cheng	4-1993
5415188	Altshuler	5-1995
5680875	Winters	10-1997

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3745788                   Sullivan                   7-1973

2004/0163665               Alvarez                   8-2004

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 11 is rejected under 35 U.S.C. 102(b) as being anticipated by Cheng (United States Patent No. 5,199,452).

Cheng discloses a dental hygiene apparatus comprising a dispensing member 12, a means 24 for retaining dental floss relative to the dispensing member, an accumulating member 14, and a means 32 for accumulating dental floss relative to the accumulating member. The dispensing member and the accumulating member are color coded (see col. 4, lines 39-47). The means for retaining floss comprise a dispensing bobbin and an accumulating bobbin. The bobbins are enclosed in a housing of the respective dispensing and accumulating members.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 5, 6 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng in view of Altshuler (United States Patent No. 5,415,188) and Winters.

Cheng discloses the invention essentially as claimed and further discloses the means for accumulating dental floss including an accumulating bobbin (see fig. 3); Cheng fails to show the means for assuring unidirectional rotation of the dispensing bobbin the dispensing member and the accumulating member each including an annular ring and the dispensing bobbin being annular. Altshuler discloses a flossing device wherein means are provided on both the dispensing bobbin and the accumulating bobbin are each provided with means for assuring unidirectional rotation (col. 2, lines 9-31). Winters discloses a flossing device (fig. 8) wherein the floss spool (50) is contained in a housing (58) and includes a ring (hole 54, figs. 6a and 7) for receiving the finger of the user. It would have been obvious to one skilled in the art to provide the dispensing bobbin of the device of Cheng with means for assuring unidirectional rotation of the dispensing bobbin in view of Altshuler in order to prevent used floss from being wound on the dispensing bobbin, thus assuring only clean floss will be dispensed therefrom and it would also have been obvious to one skilled in the art to provide the device of Cheng as modified by Altshuler with a ring on the accumulating

member in view of Winters in order to allow the user a better grip on the device. And it would have been obvious to one having an ordinary skill in the art at the time the invention was made to construct the shape of the ring and the dispensing bobbin being annular, since such a modification would have involved a mere change in the shape of the known component. A change in shape is generally recognized as being within the level or ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

Claims 7, 8 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng in view of Winters.

Cheng discloses the invention essentially as claimed except for the dispensing member and the accumulating member each including an annular ring and the dispensing bobbin being annular. Winters discloses a flossing device wherein the floss spool is contained in a housing and includes a ring for receiving the finger of the user (see figure 10). It would have been obvious to one skilled in the art to provide the device of Cheng with a ring on each of the dispensing member and the accumulating member in view of Winters in order to allow the user a better grip on the device. And it would have been obvious to one having an ordinary skill in the art at the time the invention was made to construct the shape of the ring and the dispensing bobbin being annular, since such a modification would have involved a mere change in the shape of the known component. A change in shape is generally recognized as being within the level or ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

Claims 9, 10, 12-17, 22, 23, 65 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng in view of Alvarez (United Sates Patent Publication No. 2004/0163665) and Winters.

Cheng discloses the invention essentially as claimed except for the means for inducing automatic accumulation of floss and the accumulating member each including an annular ring and the dispensing bobbin being annular. Alvarez discloses a flossing device having means for inducing automatic accumulation of floss on the accumulating bobbin and also a scrubber element 36. Winters discloses a flossing device wherein the floss spool is contained in a housing and includes a ring for receiving the finger of the user (see figure 10). It would have been obvious to one skilled in the art to provide the device of Cheng with means for inducing automatic accumulation of floss in view of Alvarez in order to make it easier for the user to refresh the section of floss when it becomes used. It would have been obvious to one skilled in the art to provide the device of Cheng as modified by Alvarez with a ring on the accumulating member in view of Winters in order to allow the user a better grip on the device. And it would have been obvious to one having an ordinary skill in the art at the time the invention was made to construct the shape of the ring and the dispensing bobbin being annular, since such a modification would have involved a mere change in the shape of the known component. A change in shape is generally recognized as being within the level or ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955). Regarding claim 23, it would have been further obvious also in view of Alvarez to provide a scrubber member in order to neutralize any germs that are on the floss.

Claims 18 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng in view of Alvarez and Winters as applied to claims 16 and 65 above, and further in view of Altshuler.

Altshuler discloses a flossing device wherein means are provided with a coil spring for rotating the accumulating bobbin. It would have been obvious to one skilled in the art to provide the device of the combination Cheng as modified by Alvarez and Winters with a coil spring for rotating the accumulating bobbin in view of Altshuler instead of a motor in order to provide a more simplified device that does not need to utilize batteries.

Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng in view of Winters as applied to claim 7 above, and further in view of Sullivan (United States Patent No. 3,745,788).

Sullivan discloses a means for varying the size of a ring comprising a removable sizing member 14. It would have been obvious to one skilled in the art to provide the device of Cheng as modified by Winters with a removable sizing member for varying the size of the ring in view of Sullivan in order to assure proper fitting of the ring on the finger of the user.

#### **(10) Response to Argument**

Appellant raises a few of issues in his brief which require rebuttal in this examiner's answer.

- 1) Appellant argues on page 14, lines 14 and 15, of the corrections to the brief filed 12/29/08:

"Neither Cheng, Winters, Altshuler, nor any obvious combination or modification discloses an annular dispensing ring with a concentrically retained dispensing bobbin", and Appellant also argues figure 10 of Winters does not show the floss spool with a ring for receiving the finger of the user on page 15, lines 4-8 of the brief.

In response to Appellant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Appellant is noted that as indicated in the rejections above, Cheng fails to show the means for assuring unidirectional rotation of the dispensing bobbin the dispensing member and the accumulating member each including an annular ring and the concentric dispensing bobbin being annular. Altshuler teaches to use means for assuring unidirectional rotation of the dispensing bobbin in order to prevent used floss from being wound on the dispensing bobbin, thus assuring only clean floss will be dispensed therefrom, therefore it is proper to combine with Cheng. Further, it is noted that the recitation of figure 10 of Winters in the office action mailed 1/09/2008 is a typo error and a correction to refer to the correct figures has been made in the above rejections. Winters, as discussed above, teaches a dispensing ring (fig. 8a) with a concentric dispensing bobbin (50), wherein the bobbin having a hole (54, fig. 6a) for receiving the finger of the user (see fig. 7). Therefore, it would have been obvious to

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modify Cheng floss dispensing device with the dispensing ring of Winters in order to allow the user a better grip on the device.

Appellant is also noted that, as indicated in the above rejections, the annular shape of the dispensing ring and the bobbin would involve a matter of design choice since Appellant has not disclosed that any shape solves any stated problem or is for any particular purpose.

- 2) Appellant further argues the same arguments with regard to independent claims 7, 67 and 9 on page 16 to page 18 of the brief; It is noted that Appellant is directed to the above responses.
- 3) Lastly, Appellant argues on page 18, lines 18-20 and on page 19, lines 1 and 2 of the brief:

“Nowhere in the cited references is there disclosed or rendered obvious a dental hygiene apparatus with, among other things, a dispensing member and a structurally separate accumulating member that are color coded to enable a user to differentiate between the dispensing member holding clean floss and the accumulating member holding contaminated floss.

As indicated in the above rejections, Cheng discloses the teaching of using color coded for the housings (col. 4, lines 39-47) in order to enable the user to differentiate between the dispensing member and the accumulating member.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/R.D./

Conferees:

/Janet C. Baxter/  
TC 3700 TQAS

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Supervisory Patent Examiner, Art Unit 3732